

Amendments to the Specification:

Please replace the paragraph beginning at page 5, line 1, with the following:

--Figure 4 shows the nucleotide (SEQ ID NO:50) and amino acid (SEQ ID NO:8) sequence of Ra35 (195 amino acids from the N-terminal portion of MTB32A).--

Please replace the paragraph beginning at page 5, line 3, with the following:

--Figure 5 shows an alignment of the amino acid sequences of MTB72F (SEQ ID NO:16) and the mutated version MTB72FMutSA (SEQ ID NO:18).--

Please replace the paragraph beginning at page 5, line 5, with the following:

--Figure 6 shows an alignment of the amino acid sequences of mature (full length) Ra35/MTB32A (SEQ ID NO:4) and the mutated version Ra35FLMutSA (SEQ ID NO:6).--

Please replace the paragraph beginning at page 7, line 8, with the following:

--SEQ ID NO:1-4: MTB32A (Ra35FL or Ra35 mature), the sequence of which is also disclosed as SEQ ID NO:17 (cDNA) and SEQ ID NO:79 (protein) in the U.S. patent applications No. 08/523,436, 08/523,435, No. 08/658,800, No. 08/659,683, No. 08/818,112, No. 09/056,556, and No. 08/818,111 and in the WO97/09428 and WO97/09429 applications, *see also Skeiky et al., Infection and Immunity* 67:3998-4007 (1999). The term MTB32A also includes MTB32A amino acid sequences in which any one of the three amino acids at the active site triad (His, Asp, Ser), e.g., the serine residue at amino acid position 207 208 in SEQ ID NO:2

or amino acid position 183 in SEQ ID NO:4, has been changed to another amino acid (e.g., alanine, Ra35FLMutSA, *see, e.g.*, Figure 6 and SEQ ID NO:6).--

Please replace the paragraph beginning at page 8, line 8, with the following:

--The following provides sequences of some fusion proteins of the invention:

SEQ ID NO:15 and 16: MTB72F (Ra12-TbH9-Ra35), the sequence of which is disclosed as SEQ ID NO:1 (DNA) and SEQ ID NO:2 (protein) in the US patent application No. 09/223,040, No. 09/223,040, and in the PCT/US99/07717 application. The term MTB372F also includes MTB72F amino acid sequences in which any one of the three amino acids at the active site triad in Ra35FL (i.e., His, Asp, or Ser), has been changed as described above (*see, e.g.*, MTB72FMutSA (SEQ ID NO:18), Figure 5).--

Please replace the paragraph beginning at page 10, line 16, with the following:

~~--SEQ ID NO:46 and 47: DPV-MTI-MSL-MTCC#2 (MTb71F), the sequence of which is disclosed as SEQ ID NO:15 (nucleic acid) and in SEQ ID NO:16: (protein) in the U.S. patent application No. 09/287,849 and in the PCT/US99/07717 application.~~

SEQ ID NO:46 and 47: DPV-MTI-MSL (MTb31F), the sequence of which is disclosed in SEQ ID NO:18 (cDNA) and SEQ ID NO:19 (protein) in the U.S. patent application No. 09/287,849 and in the PCT/US99/07717 application.--

Appl. No. 09/886,349
Amdt. dated September 24, 2003
Reply to Notice to Comply of August 29, 2003

PATENT

Please replace the paragraph beginning at page 10, line 20, with the following:

~~--SEQ ID NO:48 and 49: DPV-MTI-MSL (MTb31F), the sequence of which is disclosed in SEQ ID NO:18 (cDNA) and SEQ ID NO:19 (protein) in the U.S. patent application No. 09/287,849 and in the PCT/US99/07717 application.~~

SEQ ID NO:48 and 49: DPV-MTI-MSL-MTCC#2 (MTb71F), the sequence of which is disclosed as SEQ ID NO:15 (nucleic acid) and in SEQ ID NO:16: (protein) in the U.S. patent application No. 09/287,849 and in the PCT/US99/07717 application.--

Please insert the accompanying paper copy of the Sequence Listing, page numbers 1 to 51, at the end of the application.